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PATENT COOPERATION TREATY

10/536781

26 MAY 2003

PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference H02B162 PCT/ASB	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 03/05370	International filing date (day/month/year) 09/12/2003	(Earliest) Priority Date (day/month/year) 17/12/2002
Applicant  THE BOC GROUP PLC		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

2  
☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/GB 03/05370

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 F04D19/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F04D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 168 374 B1 (ODENDAHL HEINZ-DIETER ET AL) 2 January 2001 (2001-01-02) column 2, line 31-38 column 2, line 56-62 claim 1 figures 3-5	1-9
X	US 2002/054815 A1 (KAWASAKI HIROYUKI ET AL) 9 May 2002 (2002-05-09) paragraph '0052! figure 11	1
X	US 6 422 829 B1 (SCHUETZ GUENTER) 23 July 2002 (2002-07-23) the whole document	1-9

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*Z\* document member of the same patent family

Date of the actual completion of the international search

21 April 2004

Date of mailing of the international search report

29/04/2004

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

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## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	EP 1 101 945 A (BOC GROUP PLC) 23 May 2001 (2001-05-23) the whole document ---	1
A	EP 0 959 253 A (BOC GROUP PLC) 24 November 1999 (1999-11-24) the whole document -----	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/05370

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 6168374	B1	02-01-2001	DE	19632874 A1	19-02-1998
			DE	59706325 D1	21-03-2002
			WO	9807989 A1	26-02-1998
			EP	0918938 A1	02-06-1999
			JP	2000516321 T	05-12-2000
US 2002054815	A1	09-05-2002	JP	2000274394 A	03-10-2000
			EP	1039137 A2	27-09-2000
			SG	76003 A1	24-10-2000
			TW	533276 B	21-05-2003
			US	6343910 B1	05-02-2002
US 6422829	B1	23-07-2002	DE	29717079 U1	06-11-1997
			DE	59808840 D1	31-07-2003
			WO	9915793 A1	01-04-1999
			EP	1017944 A1	12-07-2000
			JP	2001517757 T	09-10-2001
EP 1101945	A	23-05-2001	EP	1101945 A2	23-05-2001
			JP	2001182685 A	06-07-2001
			US	6375413 B1	23-04-2002
EP 0959253	A	24-11-1999	EP	0959253 A2	24-11-1999
			JP	11351190 A	21-12-1999
			US	6135709 A	24-10-2000